

Title (en)

ALUMINUM NITRIDE SINTER AND PRODUCTION METHOD THEREFOR

Title (de)

ALUMINIUMNITRID-SINTERKÖRPER UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

AGGLOMERE DE NITRURE D'ALUMINIUM ET METHODE DE PRODUCTION

Publication

EP 0743290 B1 20030507 (EN)

Application

EP 95907830 A 19950203

Priority

- JP 9500141 W 19950203
- JP 1180494 A 19940203
- JP 5048194 A 19940322

Abstract (en)

[origin: WO9521139A1] An aluminum nitride sinter in which the content of each of its constituent metal elements other than aluminum is not greater than 100 ppm and which is black with lightness of not higher than N4 stipulated in JIS Z 8721. Preferably, a relative density of the sinter is at least 99.3 % and a mean particle size of crystal particles constituting the sinter is from 0.6 to 4.0 μ m. Aluminum nitride powder obtained by reductive nitriding is sintered at a temperature of not lower than 1,800 DEG C and a pressure of at least 120 kg/cm². This temperature is preferably not higher than 2,000 DEG C, and sintering is preferably carried out for at least 2 hours but not longer than 5 hours.

IPC 1-7

C04B 35/581

IPC 8 full level

C04B 35/581 (2006.01)

CPC (source: EP US)

C04B 35/581 (2013.01 - EP US)

Cited by

EP0757023A3; US5728635A; US5908799A; EP0992470A3; US6815646B2; WO2009012455A1; KR100912641B1; US7078655B1; US8047288B2; US8178477B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 9521139 A1 19950810; DE 69530678 D1 20030612; DE 69530678 T2 20040401; EP 0743290 A1 19961120; EP 0743290 A4 19970730; EP 0743290 B1 20030507; KR 100204268 B1 19990615; US 5767027 A 19980616

DOCDB simple family (application)

JP 9500141 W 19950203; DE 69530678 T 19950203; EP 95907830 A 19950203; KR 19960704158 A 19960731; US 66949296 A 19960711